

MSD384

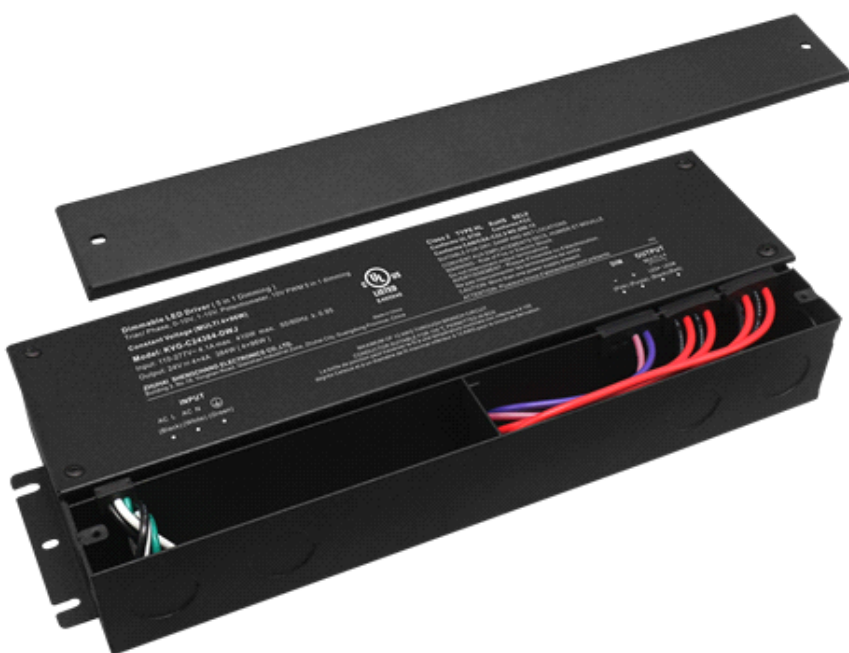
MAGNA
SLIM-TRAC
MAGNETIC LIGHTING SYSTEM

KENDAL
LIGHTING INC.

24VDC - [384W]



FC Class 2 TYPE HL SELV CE RoHS Reach



Features

Output:	Constant Voltage
Range:	110-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 91%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	For dry, damp & wet location (24V); for dry & damp location (48V)
Dimming function:	<u>Phase dimming</u> : work with Forward phase, MLV and Reverse phase, ELV, TRIAC dimmers. 0-10V dimming: 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
Dimming range:	0-100%
Application:	Suitable for the application of LED lighting
Warranty:	5 years warranty
Others:	PWM output, High power factor $PF \geq 0.95$, flicker-free dimming

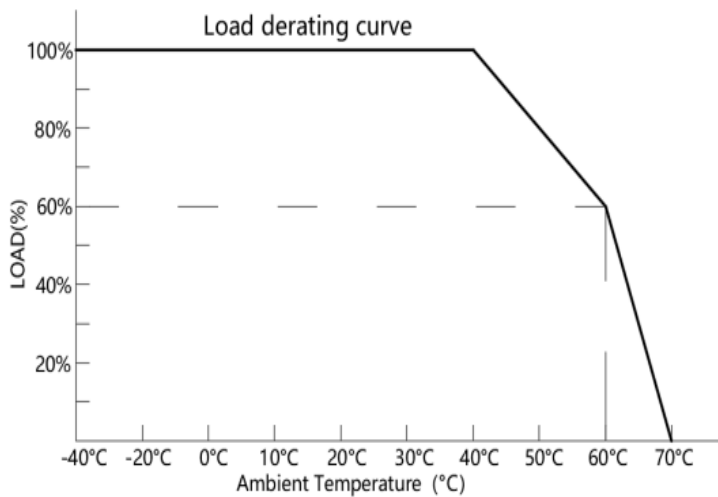
Specification

Model		MSD384
Certificate		(24V):UL / cUL / FCC / Class 2 / CE / SELV / RoHS / REACH
Output	DC Voltage	24V
	Voltage Tolerance	±0.5V
	Voltage Regulation	±0.5%
	Rated current	4*4A
	Rated power	384W (4*96W)
	Load Regulation	±1%
Input	Voltage Range	110-277VAC
	Frequency Range	47 - 63Hz
	Power Factor@ full load	0.99@120VAC 0.99@277VAC
	THD(Typ.) @ full load	<20%
	Efficiency@ full load	88%@120VAC 91%@277VAC
	AC Current (Max.)	4.1A@100VAC
	Inrush Current (Typ.)	30A,1.2ms @50%Ipeak
Protection	Leakage current	<0.5mA
	Short Circuit	Shut down o/p voltage, re-power on to recover after fault condition is removed
	Over Load	≤120% Hiccup mode, recovers automatically after fault condition is removed
Environment	Over temperature	Shell surface temp.100°C±10°C shut down o/p voltage, automatically recover after cooling
	Working TEMP.	-40~+60°C (see below derating curve)
	Working Humidity	20 - 95%RH non-condensing
	Storage TEM.,Humidity	-40 - +80°C,10 - 95% RH non-condensing
	TEMP.coefficient	±0.03%/°C(0 - 50°C)
Safety & EMC	Vibration	10~500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,Z axes
	Safety standards	UL8750 CAN/CSA-C22.2 No.250.13(US)
	Withstand voltage	I/P-O/P:1.8KVAC I/P-FG:1.8KVAC O/P-FG:1.8KVAC (US)
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25°C / 70% RH
Others	EMC Emission	FCC 47 CFR Part 15, Subpart B(US)
	Net Weight	2.85Kg
	Dimension	323*140.4*51.8mm (L*W*H)
Notes	Packing	380*305*160mm 5 pcs/CTN 15.28KG/CTN
	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°C of ambient temperature. Tolerance: includes set up tolerance and load regulation . 	

Efficiency Curve (efficiency vs output load)

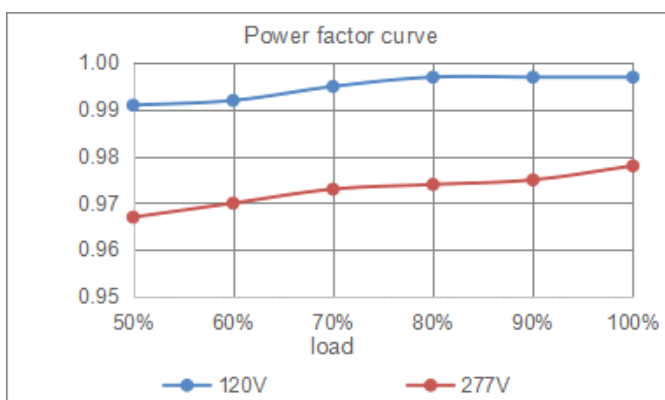


Derating Curve (output load vs TEMP.)

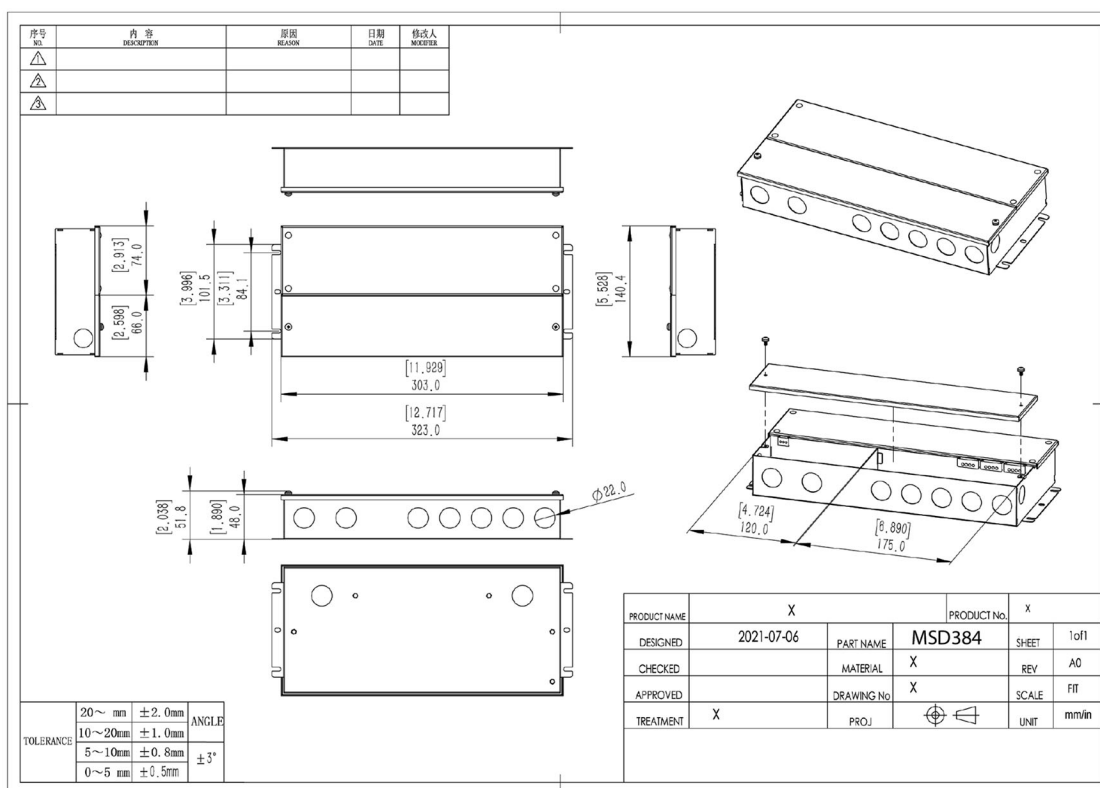


1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

Power Factor Curve



Mechanical Specification



24VDC - (384W)

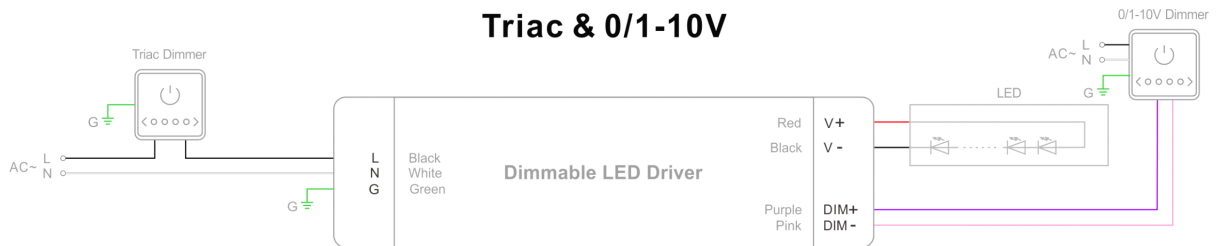
1. Input wire 18AWG, Black and White to be connected to AC (L) and (N) ,Green wire go ground .
2. Output wire 4*16AWG, Red to LED Positive side (+), Black to LED Negative side (-).
3. Dimming cable 4*18AWG, DIM (+) Purple to 0/1-10V dimmer signal (+), DIM (-) Gray to 0/1-10V dimmer signal (-).
4. Please DO NOT connect “DIM-“ to “LED-“, “DIM+“ to “ LED+“, or other incorrect connection.
5. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

Warm tips:

1. Recommended Max. Carrying Current (A) = wire diameter(mm²) x 10A/mm².
For example: 1mm² output cable, Recommended Max. Carrying Current (A) = 1mm² x 10A/mm² =10A.
2. Any other requests for, we can customized.

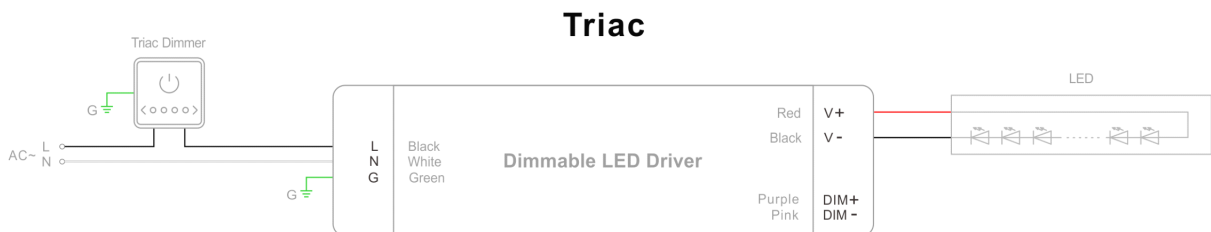
Dimming Operation and Connecting Diagram

- **Using two ways of dimming at the same time**, you must be assured that LED lighting is up to the max. Brightness then you could operate with the other dimming;

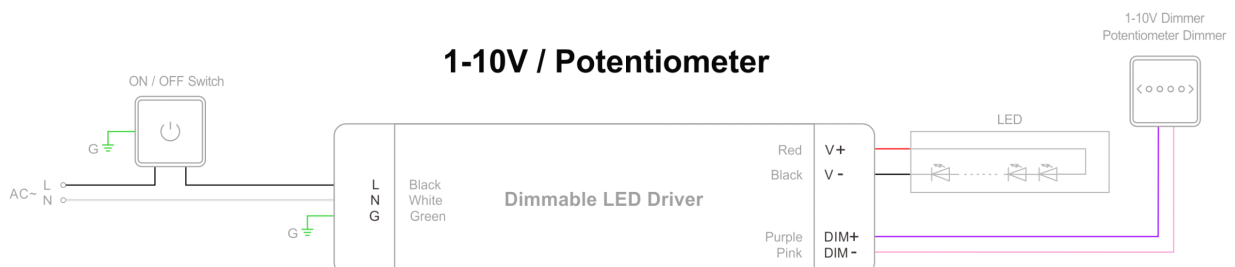


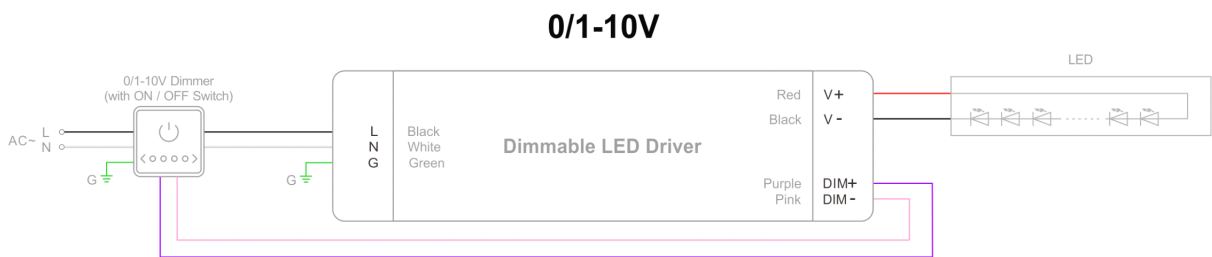
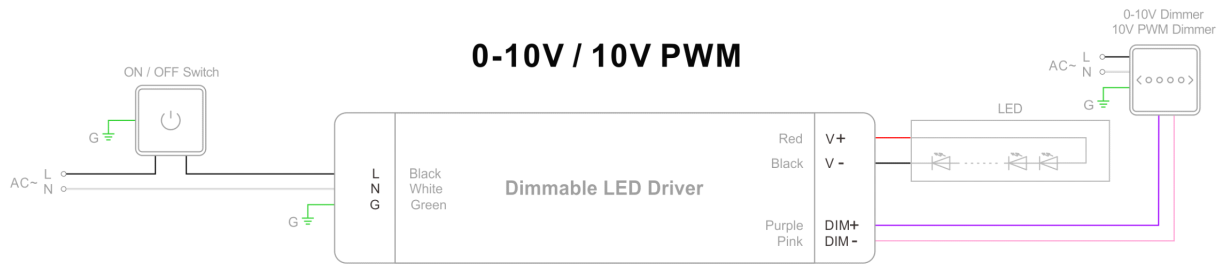
- **Using one dimming ---TRIAC/Phase cut dimming**

1. The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer or lighting system.
2. Working with forward phase, MLV and Reverse phase, ELV, TRIAC dimmers or light system.
3. Min. loading is about 10%.
4. Please try to use dimmers with power at least 2 times as the output power of the driver.



- **Using one dimming ---0-10/ 1-10V/ 10V PWM/ Potentiometer dimming**





Instruction

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver Cannot work normally, don't maintain privately.